

Application No.: 10/717,910

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IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A reagent vessel cap, comprising:

a sealing member made of an elastic body having radial slits from the center toward ~~the~~
an outer periphery, ~~being~~ is arranged on ~~the~~ an opening of a vessel, and supported with a cap
body, for shielding a reagent contained in the vessel from outside air; and

a pressurizing member attached to the cap above the sealing member has a through hole
and is retained in position by the biasing force of a ~~built-in~~ spring member firmly fixed between
the pressurizing member and a fixing member arranged on the sealing member, for expanding
the radial slits of the sealing member downwardly to open the vessel by the pressure from above
and returning in position by relaxing of the pressure.

2. (Currently Amended) A reagent vessel cap, comprising:

a hollow-cylindrical cap body integrally molded of a female screw to be in engagement
with a male screw formed around the an outer periphery of the an opening of a vessel body, a
flanged engaging part projecting axially thereabove, and an engaging protrusion around the an
upper region of the outer periphery of the flanged engaging part;

a plate-like elastic sealing member arranged in the cap body, and integrally molded of a
plurality of slits extending from the center toward ~~the~~ an outer periphery of the sealing member
and an engaging part having an inverse L-shape in section around the periphery of the sealing
member through a hinge;

a fixing member including a hollow cylinder and an engaging part formed around ~~the~~ a
lower region of the outer periphery of the hollow cylinder, wherein the lower region of a surface

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of the engaging part being arranged on the sealing member, and one end of a spring member is firmly fixed to ~~the~~ an upper region of the surface of the engaging part; and

a pressurizing member integrally molded of:

a substrate having a through hole [[:]] ,

an outer cylinder provided around ~~the~~ an outer periphery of the substrate as its inner periphery being ~~is~~ in contact with the outer periphery of the cap body [[:]] ,

an inner cylinder provided along the through hole as its outer periphery being is in contact with ~~the~~ an inner periphery of the fixing member, the outer cylinder and the inner cylinder being vertically downwardly arranged [[:]] , and

an engaging protrusion provided around the lower region of the inner periphery of the outer cylinder, the engaging protrusion being in engagement with the engaging protrusion of the cap body, wherein the other end of the spring member is firmly fixed between the outer cylinder and the inner cylinder of the pressurizing member [[:]] ,

wherein the pressurizing member is always positioned above the sealing member by the spring member, ~~wherein~~ when the pressurizing member is pushed downward against the a biasing force of the spring member, the pressurizing member is pushed downward with the cap body and the fixing member as guides, the end of the pressurizing member pushes the sealing member downward, so that the slits of the sealing member [[:]] are expanded to communicate the content of the vessel with the exterior, and ~~wherein~~ when the pressure to the pressurizing member is relaxed, the pressurizing member returns to position, so that the sealing member returns to its initial position by its elasticity to bring the slits into close contact with each other, thereby shielding the content of the vessel from the exterior.

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3. (Currently Amended) A reagent vessel cap according to Claim 1 or 2, wherein the sealing member made of ~~[[a]]~~ an elastic plate having a ~~specified~~ reasonable thickness to expand the slits and return its initial position by an elastic property of itself, is divided into four equal parts by the slits radially extending from the center toward the outer periphery.

4. (Original) A reagent vessel cap according to Claim 1 or 2, wherein the slits formed in the sealing member have a length from the center of the sealing member to the position with which the rim of the pressurizing member is in contact.

5. (Original) A reagent vessel cap according to Claim 2, wherein the cap body is constructed such that the rim of the flanged engaging part around the inner periphery extends downward to be brought into contact with the inner periphery of the opening of the vessel body so as to be retained to the vessel body by the extending part and the female screw.

6. (Currently Amended) A reagent vessel cap according to Claim 2, wherein the fixing member ~~[[has]]~~ comprises the hollow cylinder, the flanged engaging part around the lower periphery of the hollow cylinder, and the spring member whose one end is firmly fixed to the upper surface of the flanged engaging part, which are integrally molded of plastic.

7. (Original) A reagent vessel cap according to Claim 2, wherein the pressurizing member has a thin part at part of the upper periphery and a mark for indicating the thin part, wherein by pushing the thin part, the engagement between the cap body and the outer cylinder is cancelled.

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8. (Currently Amended) A method for shielding a reagent from outside air comprising the steps of:

arranging a sealing member made of an elastic plate with radial slits from the center toward ~~the~~ an outer periphery in ~~the~~ an opening of a vessel body containing a reagent;

arranging ~~an~~ a pressurizing member above the sealing member, which has a through hole and is retained in position by the biasing force of a ~~built-in~~ spring member firmly fixed between the pressurizing member and a fixing member arranged on the sealing member;

pushing the pressurizing member from above to expand the radial slits of the sealing member downwardly, thereby opening the vessel to collect the reagent; and

relaxing the pressure to return the pressurizing member to position and also to return the expanded sealing member to its initial position by ~~the~~ an elastic property of itself, thereby bringing the radial slits into tight contact with each other to shield the reagent from outside air after the collection of the reagent.